

580 (CCPA 1974). It is also quite clear that all the details do not have to be set forth in the claim in order for the claim to recite that inventive portion under 112-6.

The notion that the apparatus of Taniguchi may be CAPABLE of achieving increasing capacitance as claimed is totally irrelevant. *"Although a prior art device may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so."* In re Mills, 916 F.2d at 682, 16 USPQ2d at 1432 Fed. Cir. 1990). See also In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

35 USC 102(e) precludes a patent if "the invention was described in...a patent filed...before the invention by the applicant...." The term "described" generally means that it must have been so described as to enable those skilled in the art with which it most nearly appertains to make and use the invention.

In Dewey & Almy Chemical Co. v. Mimex Co., Inc. 52 USPQ 138, 142, C.C.A. 2 (1942), Judge Learned Hand stated, *"No doctrine of the patent law is better established than that a prior patent or other publication to be an anticipation must bear within its four corners adequate directions for the practice of the patent invalidated. If the earlier disclosure offers no more than a starting point for further experiments, if its teaching will sometimes succeed and sometimes fail, if it does not inform the art without more how to practice the new invention, it has not correspondingly enriched the store of common knowledge, and it is not an anticipation."*

In Re Brown, 141 USPQ 245, 249 (CCPA 1964) stated, *"We think, rather, that the true test of any prior art relied on to show or suggest that a chemical compound is old, is whether the prior art is such as to place the disclosed 'compound' in the possession of the public."* (Cited cases have been omitted.) The Court then went on to quote from Volume 1 of Robinson on Patents (1890) at page 451, *"Finally, the description must place the invention in the possession of the public as fully as if the art or instrument itself had been practically and publicly employed. In order to accomplish this, it must be so particular and definite that from it alone, without experiment or the exertion of his own inventive skill, any person versed in the art to which it appertains could construct and use it."*

The case of In Re Felton, 179 USPQ 296 (CCPA 1973) involved a claim which had a dimension related to the viscosity of fluid to be used with the claimed device, rejected on a prior Sands patent. *"In our view, the limitation in claims 9 and 10 does distinguish them from the Sands' structure. In this regard we do not disagree with the board's apparent conclusion that an intermediate structure made for the Sands' device could possess the characteristics*

called for in these claims. However, in view of the purpose for which the Sands' device is intended, it is apparent that it requires no critical dimension which would lead to a structure inherently having those characteristics. Therefore, it would be mere happenstance if any structure made according to Sands met the limitations of the claims. An accidental or unwitting duplication of an invention cannot constitute an anticipation. *Tilghman v. Proctor*, 102 U.S. 707 (1880); *Eibel Process Co. v. Minnesota and Ontario Paper Co.*, 261 U.S. 45 (1923). For this reason, we do not believe that Sands has 'identically disclosed or described' the invention as required of an anticipatory reference applied under section 102. The disclosure as a whole cannot be considered to sufficiently direct one skilled in the art to the invention which is a single drop dispenser requiring critical dimensions." (Emphasis added)

In the case of *In re Marshall*, 198 USPQ 344, (CCPA 1978) the issue was a claim for a weight reduction method involving a particular drug; the prior art involved the use of the same drug in order to treat gastrointestinal problems. The Court stated, *id* at page 346, "*The PDR, however, teaches using drugs containing the anesthetic oxethazaine to inhibit release of the acid-stimulating hormone, gastrin, in order to treat esophagitis, gastritis, peptic ulcer and irritable colon syndrome. Nothing in the PDR remotely suggests taking oxethazaine to lose weight. If anyone ever lost weight by following the PDR teachings it was an unrecognized accident. An accidental or unwitting duplication of an invention cannot constitute an anticipation.*"

In *Akzo N.V. v. International Trade Commission*, 1 USPQ2d, 1241, 1246, (Fed. Cir. 1986), the Court said "*The Commission noted that while the Morgan '645 patent called for the use of sulfuric acid, it did not call for the use of at least 98% concentrated sulfuric acid which was critical for the success of the Blades process. The Commission also concurred with the ALJ and found that concentrated sulfuric acid is not inherently 98% sulfuric acid to one skilled in the art.*"

Thus, all by itself, "means...for increasing capacitance of the cell" renders claim 1 patentable over Taniguchi.

Concerning a separate bi-layer and substrate, it is the applicant that determines the meaning of the claims, not the Patent Office. "*If extrinsic reference sources, such as dictionaries, evidence more than one definition for the term, the intrinsic record must be consulted to identify which of the different possible definitions is most consistent with applicant's use of the terms.*" *Brookhill-Wilk 1*, 334 F. 3d at 1300, 67 USPQ2d at 1137. "*Where there are several common meanings for a claim term, the patent disclosure serves to*

point away from the improper meanings and toward the proper meanings.” Renishaw PLC v. Marposs Societa’ per Axioni, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998). “Claims are not to be read in a vacuum and while it is true they are to be given the broadest reasonable interpretation during prosecution, their terms still have to be given the meaning called for by the specification of which they form a part. We cannot read the terms ‘legible’ and ‘information’ on Bernstein’s confusion patterns, as did the examiner and the board. They are not ‘legible’ as appellants use the term, and they convey no information.” In re Royka, supra.

“When the applicant states the meaning that the claim terms are intended to have, the claims are examined with that meaning, in order to achieve a complete exploration of the applicant’s invention and its relation to the prior art.” In re Zletz, 893 F.2d 319, 13USPQ2d 1320 (Fed. Cir. 1989).

Claim 1 calls for “a contact bi-layer...supported **ON** a porous substrate layer.” The Examiner’s contention is that that is also the case with Taniguchi. However, the cited portion of Taniguchi makes it clear that Taniguchi’s phobic and phobic materials are not transferred onto the porous substrate, but rather are formed within the porous substrate. The use of the word “substrate” calls to mind all of the definitions which were provided by applicant on July 26, 2007 at an in-person interview. The term “on” is not the same as the term “in”.

The reference is being “construed” to be other than it is, and other than that which applicant has claimed.

Taniguchi does not provide adequate directions for the practice of the invention. (Dewey, supra). Taniguchi’s description does not place the subject invention in the possession of the public (Brown, supra), or enable use of the invention from Taniguchi’s description alone (Robinson, supra).

Taniguchi certainly did not intend or appreciate applicant’s invention (See Lundy and Eibel, supra). Although Taniguchi could alter his material to provide the claimed characteristic in applicant’s material, Taniguchi has not one word about capacitance, which cannot constitute anticipation. (Felton, supra).

If concentrated sulfuric acid is not 98% sulfuric acid (Akzo, supra), no mention of the altered material in Taniguchi is not an anticipation of the altered material claimed herein.

Since claims 2, 8, 9, 13 and 14 depend from claim 1, they are patentable because claim 1 is patentable, as described hereinbefore. Therefore, reconsideration and allowance of claims 1, 2, 8, 9, 13, and 14 is respectfully requested.

5,6. Claims 3-7 and 10-12 are rejected as obvious over Taniguchi in view of Lindstrom. Claims 3-7 and 10-12 depend from claim 1 and are patentable for the reasons set forth in the paragraphs numbered 3,4 hereinbefore. Therefore, reconsideration and allowance of claims 3-7 and 10-12 is respectfully requested.

7. Claims 17-19 are rejected as obvious over Taniguchi in view of applicant's admitted prior art. Claim 17 requires "at least one of said support plates comprising a hydrophilic substrate layer" together with "a partially hydrophobic bi-layer disposed between said hydrophilic substrate layer and said membrane electrode assembly." In other words, the order has to be hydrophilic substrate layer, hydrophobic bi-layer, and membrane electrode assembly. Taniguchi has hydrophobic and hydrophilic both adjacent the MEA; there is no order – no sequence to the hydrophilicity and hydrophobicity. Taniguchi is not the same.

The rejection, bottom of page 6, makes it clear: the Examiner's reference to "hydrophilic/hydrophobic bi-layers" is an indication that the actual claimed subject matter has not been properly considered in this rejection. *"Rather than reject the claims as indefinite, the board chose to ignore the language it considered indefinite, and proceeded as through that language were not in the claims....All words in a claim must be considered in judging the patentability of that claim against the prior art."* In Re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

The words of claim 17 require that the MEA be contacted by a hydrophobic bi-layer, without any hydrophilic elements, and that the bi-layer be supported by a hydrophilic substrate, separated from the MEA by the hydrophobic bi-layer. These words have been ignored. Since this is not taught in Taniguchi, the combination of old water transport plates and Taniguchi do not render claim 17 obvious.

The rejection also states that Taniguchi's solid coolant plate and solid reactant flow field plate "reads on the claimed water transport plate." First of all, they cannot "read on" the water transport plate because the water transport plate is porous and has water in fluid communication with the gaseous flow fields. The combination of two solid plates cannot do that, and cannot equal porous plates. Furthermore, it is contrary to law: *"The examiner and the board appear to hold that the mere existence of 'functional and mechanical equivalence' establishes 'obviousness.' We think this involves a non-sequitur. Expedients which are functionally equivalent to each other are not necessarily obvious in view of one another."* In re Scott, 323 F.2d 1016, 139 USPQ 297 (CCPA 1963). (Emphasis in original)

Claim 18 is patentable as depending from claim 17.

Claim 19 requires "a hydrophilic substrate layer" which Taniguchi does not have. Case law cited hereinbefore makes it clear that to render a claim obvious, the prior art must have the same structure, not merely a similar function. The allegation that it would be obvious to optimize the porosity of the substrate layer "to arrive at the claimed porosity of 65-75%" is taking Official Notice and it is a conclusion of law, not based on any facts (not supported by prior art).

Applicant challenges this assertion as not properly based on common knowledge and demands that if this rationale is to be maintained, documentary evidence be provided to support the assertion. 37 CFR 104(d)(2). *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). MPEP 2144.03 C.

"In nearly all cases where the individual features of combination claims can be met only by modification of individual features found in prior art, difficulty arises in determining whether invention is present. The courts generally have been accustomed to resolve doubt on the question of patentability in favor of applicants. This court has considered that to be a 'well established rule.'" In re Pappas et al., 38 CCPA 746, 185 F.2d 695, 88 USPQ 108 (Bd. P. A. & I., 1992).

Reconsideration and allowance of claims 17-19 is respectfully requested for all of the foregoing reasons.

To save the Examiner considerable time when this case is taken up, a short phone call is recommended should any issue herein still be unresolved. A few minutes on the phone could clarify a point, or result in a supplemental response which would further limit or dispose of issues. A five minute phone call can save the Examiner a lot of work. Such a phone call would be deeply appreciated.

Respectfully submitted,



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